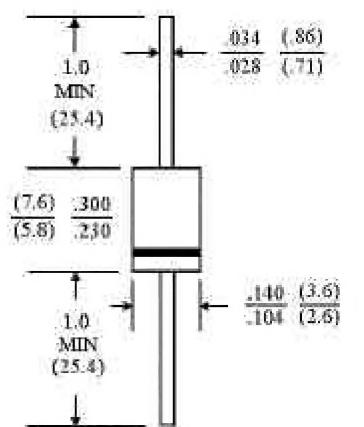


FEATURES

- High current capability
- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O rating
- Flame Retardant Epoxy Molding Compound
- 2.0 ampere operation at $T_A=55\text{ }^\circ\text{C}$ with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency
- Low leakage

DO-15



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, DO-15

Terminals: Plated axial leads, solderable per MIL-STD-202,
Method 208

Polarity: Color band denotes cathode

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICSRatings at 25 $\text{^\circ}\text{C}$ ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	TS200R	TS201R	TS202R	TS204R	TS206R	TS208R	S2010R	UNITS
Peak Reverse Voltage, Repetitive; V_{RM} :	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_A=55\text{ }^\circ\text{C}$						2.0		A
Peak Forward Surge Current, $I_{FM}(\text{surge})$ 8.3msec. single half sine-wave superimposed on rated load (JEDEC method)						70.0		A
Maximum Forward Voltage at 2.0A DC					1.3			V
Maximum Reverse Current $T_J=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=100\text{ }^\circ\text{C}$				5.0	500			\AA g A
Typical Junction capacitance (Note 1) C_J			35					pF
Typical Thermal Resistance (Note 3) $R_{\text{JK}}\text{KA}$			22					$\text{^\circ}\text{C/W}$
Maximum Reverse Recovery Time (Note 2)	150	150	150	150	250	500	500	ns
Operating and Storage Temperature Range T_J, T_{STG}				-55 TO +150				$\text{^\circ}\text{C}$

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions: $I_F=.5\text{A}$, $I_R=1\text{A}$, $I =.25\text{A}$
3. Thermal Resistance from Junction to Ambient and from junction to lead at 0.375"(9.5mm) lead length P.C.B. mounted.

RATING AND CHARACTERISTIC CURVES

TS200R THRU T S2010R

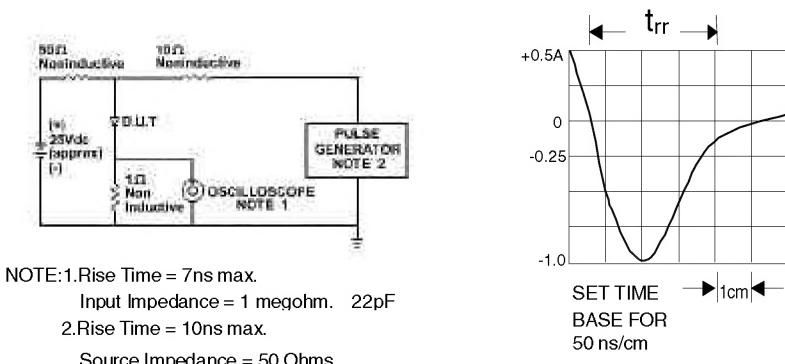


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

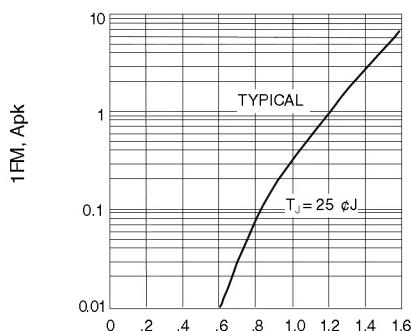


Fig. 2-FORWARD CHARACTERISTICS

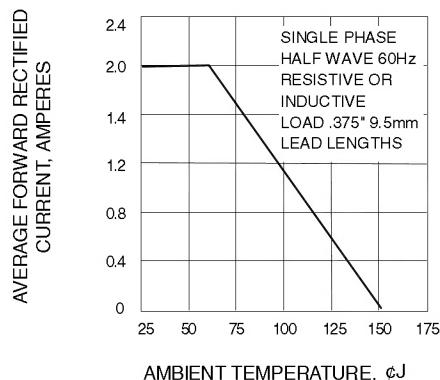


Fig. 3-FORWARD CURRENT DERATING CURVE

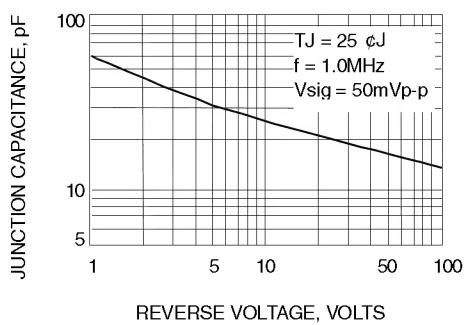


Fig. 4-TYPICAL JUNCTION CAPACITANCE

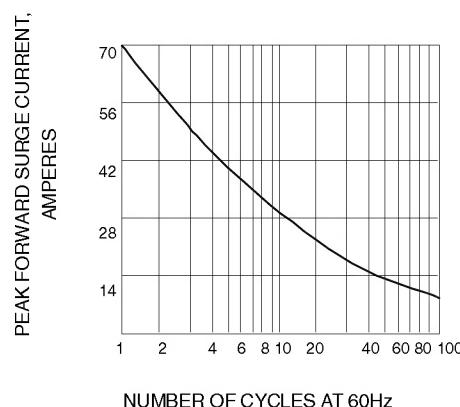


Fig. 5-PEAK FORWARD SURGE CURRENT